INTERFERENCE ANALYSIS FOR PROPOSED WGNT(TV) PORTSMOUTH, VA (CHANNEL 20)

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tvstudy v2.2.3 (Dxtpx3)
Database: localhost,  Study: wgnt20m1,  Model: Longley-Rice

Study build station data: LMS TV 2017-10-24 (75)

    Proposal: WGNT20M1 D20 DT APP PORTSMOUTH, VA
 File number: wgnt20m1
 Facility ID: 9762
Station data: User record
   Record ID: 1587
     Country: U.S.
        Zone: I

Stations affected by proposal:

Call      Chan  Svc Status  City, State              File Number            Distance
WAVY-TV   D19   DT  CP      PORTSMOUTH, VA           BLANK0000028470          1.5 km
WAVY-TV   D19   DT  BL      PORTSMOUTH, VA           DTVBL71127               1.5
WUNC-TV   D20   DT  CP      CHAPEL HILL, NC          BLANK0000025215        260.5
WUNC-TV   D20   DT  BL      CHAPEL HILL, NC          DTVBL69080             260.4
WHSV-TV   D20   DT  APP     HARRISONBURG, VA         BLANK0000029912        290.0
WHSV-TV   D20   DT  BL      HARRISONBURG, VA         DTVBL4688              273.4
WVBT      D21   DT  CP      VIRGINIA BEACH, VA       BLANK0000028471          1.5
WVBT      D21   DT  BL      VIRGINIA BEACH, VA       DTVBL65387               1.5

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

    Channel: D20
   Latitude:  36 48 31.80 N (NAD83)
  Longitude:  76 30 11.30 W
Height AMSL: 380.7 m
       HAAT: 375.0 m
   Peak ERP: 570 kW
    Antenna: Omnidirectional
Elev Pattrn: Generic
  Elec Tilt: 0.8

39.4 dBu contour:
Azimuth      ERP       HAAT   Distance
  0.0 deg    570 kW   378.2 m  102.5 km
 45.0        570      376.1    102.3
 90.0        570      376.6    102.3
135.0        570      376.0    102.3
180.0        570      374.0    102.1
225.0        570      374.1    102.1
270.0        570      373.2    102.1
315.0        570      369.2    101.7

**Proposal service area extends beyond baseline plus 1.0%
Proposal service area population is more than 95.0% of baseline

Distance to Canadian border: 692.0 km

Distance to Mexican border: 2273.7 km

Conditions at FCC monitoring station: Laurel MD
Bearing: 354.0 degrees   Distance: 263.4 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 287.3 degrees   Distance: 2515.4 km

No land mobile station failures found


Study cell size: 2.00 km
Profile point spacing: 0.10 km (Higher resolution terrain profile point spacing requested.)

Maximum new IX to full-service and Class A: 0.50%
Maximum new IX to LPTV: 2.00%

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Scenario comparisons

Case		Before		After	Percent New IX	
IX_BLANK0000028470_C	27959.1	2,028,531	27923.3	2,027,034	0.13	0.07
IX_BLANK0000028470_C	27995.2	2,029,168	27959.3	2,027,671	0.13	0.07
IX_BLANK0000028470_C	27959.1	2,028,531	27923.3	2,027,034	0.13	0.07
IX_BLANK0000028470_C	27995.2	2,029,168	27959.3	2,027,671	0.13	0.07
IX_DTVBL71127_BL_#1	27935.2	2,026,621	27879.3	2,025,570	0.20	0.05
IX_DTVBL71127_BL_#2	28003.2	2,027,399	27947.4	2,026,348	0.20	0.05
IX_DTVBL71127_BL_#3	27935.2	2,026,621	27879.3	2,025,570	0.20	0.05
IX_DTVBL71127_BL_#4	28003.2	2,027,399	27947.4	2,026,348	0.20	0.05
IX_BLANK0000025215_C	34139.2	3,935,533	33922.5	3,923,025	0.63	0.32
IX_BLANK0000025215_C	34143.2	3,935,566	33926.5	3,923,058	0.63	0.32
IX_BLANK0000025215_C	34367.4	3,963,800	34150.7	3,951,292	0.63	0.32
IX_BLANK0000025215_C	34371.4	3,963,833	34154.7	3,951,325	0.63	0.32
IX_BLANK0000025215_C	34135.3	3,935,526	33918.6	3,923,018	0.63	0.32
IX_BLANK0000025215_C	34139.2	3,935,559	33922.6	3,923,051	0.63	0.32
IX_BLANK0000025215_C	34363.4	3,963,793	34146.7	3,951,285	0.63	0.32
IX_BLANK0000025215_C	34367.4	3,963,826	34150.7	3,951,318	0.63	0.32
IX_BLANK0000025215_C	34147.3	3,936,116	33930.6	3,923,608	0.63	0.32
IX_BLANK0000025215_C	34151.2	3,936,149	33934.6	3,923,641	0.63	0.32
IX_BLANK0000025215_C	34379.4	3,964,535	34162.8	3,952,027	0.63	0.32
IX_BLANK0000025215_C	34383.4	3,964,568	34166.7	3,952,060	0.63	0.32
IX_BLANK0000025215_C	34143.3	3,936,109	33926.6	3,923,601	0.63	0.32
IX_BLANK0000025215_C	34147.3	3,936,142	33930.6	3,923,634	0.63	0.32
IX_BLANK0000025215_C	34375.5	3,964,528	34158.8	3,952,020	0.63	0.32
IX_BLANK0000025215_C	34379.5	3,964,561	34162.8	3,952,053	0.63	0.32
IX_BLANK0000025215_C	34139.2	3,935,533	33922.5	3,923,025	0.63	0.32
IX_BLANK0000025215_C	34143.2	3,935,566	33926.5	3,923,058	0.63	0.32
IX_BLANK0000025215_C	34363.3	3,963,714	34146.7	3,951,206	0.63	0.32
IX_BLANK0000025215_C	34367.3	3,963,747	34150.6	3,951,239	0.63	0.32
IX_BLANK0000025215_C	34135.3	3,935,526	33918.6	3,923,018	0.63	0.32
IX_BLANK0000025215_C	34139.2	3,935,559	33922.6	3,923,051	0.63	0.32
IX_BLANK0000025215_C	34359.4	3,963,707	34142.7	3,951,199	0.63	0.32
IX_BLANK0000025215_C	34363.4	3,963,740	34146.7	3,951,232	0.63	0.32
IX_BLANK0000025215_C	34147.3	3,936,116	33930.6	3,923,608	0.63	0.32
IX_BLANK0000025215_C	34151.2	3,936,149	33934.6	3,923,641	0.63	0.32
IX_BLANK0000025215_C	34375.4	3,964,449	34158.7	3,951,941	0.63	0.32
IX_BLANK0000025215_C	34379.4	3,964,482	34162.7	3,951,974	0.63	0.32
IX_BLANK0000025215_C	34143.3	3,936,109	33926.6	3,923,601	0.63	0.32
IX_BLANK0000025215_C	34147.3	3,936,142	33930.6	3,923,634	0.63	0.32
IX_BLANK0000025215_C	34371.4	3,964,442	34154.7	3,951,934	0.63	0.32
IX_BLANK0000025215_C	34375.4	3,964,475	34158.7	3,951,967	0.63	0.32
IX_DTVBL69080_BL_#1	33548.4	3,910,302	33319.6	3,899,804	0.68	0.27
IX_DTVBL69080_BL_#2	33548.4	3,910,302	33319.6	3,899,804	0.68	0.27
IX_DTVBL69080_BL_#3	33792.7	3,942,955	33563.8	3,932,457	0.68	0.27
IX_DTVBL69080_BL_#4	33792.7	3,942,955	33563.8	3,932,457	0.68	0.27
IX_DTVBL69080_BL_#5	33552.5	3,910,797	33323.6	3,900,299	0.68	0.27
IX_DTVBL69080_BL_#6	33552.5	3,910,797	33323.6	3,900,299	0.68	0.27
IX_DTVBL69080_BL_#7	33796.7	3,943,450	33567.9	3,932,952	0.68	0.27
IX_DTVBL69080_BL_#8	33796.7	3,943,450	33567.9	3,932,952	0.68	0.27
IX_DTVBL69080_BL_#9	33544.4	3,910,213	33315.5	3,899,715	0.68	0.27
IX_DTVBL69080_BL_#10	33544.4	3,910,213	33315.5	3,899,715	0.68	0.27
IX_DTVBL69080_BL_#11	33800.7	3,944,072	33571.8	3,933,574	0.68	0.27
IX_DTVBL69080_BL_#12	33800.7	3,944,072	33571.8	3,933,574	0.68	0.27
IX_DTVBL69080_BL_#13	33548.4	3,910,708	33319.6	3,900,210	0.68	0.27
IX_DTVBL69080_BL_#14	33548.4	3,910,708	33319.6	3,900,210	0.68	0.27
IX_DTVBL69080_BL_#15	33804.7	3,944,567	33575.9	3,934,069	0.68	0.27
IX_DTVBL69080_BL_#16	33804.7	3,944,567	33575.9	3,934,069	0.68	0.27
IX_DTVBL69080_BL_#17	33548.4	3,910,302	33319.6	3,899,804	0.68	0.27
IX_DTVBL69080_BL_#18	33548.4	3,910,302	33319.6	3,899,804	0.68	0.27
IX_DTVBL69080_BL_#19	33788.6	3,942,869	33559.8	3,932,371	0.68	0.27
IX_DTVBL69080_BL_#20	33788.6	3,942,869	33559.8	3,932,371	0.68	0.27
IX_DTVBL69080_BL_#21	33552.5	3,910,797	33323.6	3,900,299	0.68	0.27
IX_DTVBL69080_BL_#22	33552.5	3,910,797	33323.6	3,900,299	0.68	0.27
IX_DTVBL69080_BL_#23	33792.7	3,943,364	33563.8	3,932,866	0.68	0.27
IX_DTVBL69080_BL_#24	33792.7	3,943,364	33563.8	3,932,866	0.68	0.27
IX_DTVBL69080_BL_#25	33544.4	3,910,213	33315.5	3,899,715	0.68	0.27
IX_DTVBL69080_BL_#26	33544.4	3,910,213	33315.5	3,899,715	0.68	0.27
IX_DTVBL69080_BL_#27	33796.6	3,943,986	33567.8	3,933,488	0.68	0.27
IX_DTVBL69080_BL_#28	33796.6	3,943,986	33567.8	3,933,488	0.68	0.27
IX_DTVBL69080_BL_#29	33548.4	3,910,708	33319.6	3,900,210	0.68	0.27
IX_DTVBL69080_BL_#30	33548.4	3,910,708	33319.6	3,900,210	0.68	0.27
IX_DTVBL69080_BL_#31	33800.7	3,944,481	33571.8	3,933,983	0.68	0.27

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Scenario comparisons

Case		Before		After	Percent	New IX
IX_DTVBL69080_BL_#32	33800.7	3,944,481	33571.8	3,933,983	0.68	0.27
IX_BLANK0000029912_A	22494.2	624,650	22295.8	621,624	0.88	0.48
IX_BLANK0000029912_A	22486.2	624,650	22291.7	621,624	0.86	0.48
IX_BLANK0000029912_A	22506.2	625,209	22307.7	622,183	0.88	0.48
IX_BLANK0000029912_A	22498.1	625,209	22303.7	622,183	0.86	0.48
IX_BLANK0000029912_A	22498.2	624,650	22299.7	621,624	0.88	0.48
IX_BLANK0000029912_A	22490.2	624,650	22295.7	621,624	0.86	0.48
IX_BLANK0000029912_A	22510.1	625,209	22311.7	622,183	0.88	0.48
IX_BLANK0000029912_A	22502.1	625,209	22307.7	622,183	0.86	0.48
IX_BLANK0000029912_A	22386.8	621,529	22192.3	618,643	0.87	0.46
IX_BLANK0000029912_A	22378.8	621,529	22188.3	618,643	0.85	0.46
IX_BLANK0000029912_A	22398.8	622,088	22204.3	619,202	0.87	0.46
IX_BLANK0000029912_A	22390.7	622,088	22200.2	619,202	0.85	0.46
IX_BLANK0000029912_A	22390.8	621,529	22196.3	618,643	0.87	0.46
IX_BLANK0000029912_A	22382.8	621,529	22192.3	618,643	0.85	0.46
IX_BLANK0000029912_A	22402.7	622,088	22208.2	619,202	0.87	0.46
IX_BLANK0000029912_A	22394.7	622,088	22204.2	619,202	0.85	0.46
IX_DTVBL4688_BL_#1	18743.2	646,975	18711.0	647,217	0.17	-0.04
IX_DTVBL4688_BL_#2	18743.2	646,975	18711.0	647,217	0.17	-0.04
IX_DTVBL4688_BL_#3	18743.2	646,975	18711.0	647,217	0.17	-0.04
IX_DTVBL4688_BL_#4	18743.2	646,975	18711.0	647,217	0.17	-0.04
IX_BLANK0000028471_C	21596.4	1,845,820	21221.2	1,837,618	1.74	0.44
IX_BLANK0000028471_C	21576.4	1,845,819	21205.2	1,837,617	1.72	0.44
IX_BLANK0000028471_C	21596.4	1,845,820	21221.2	1,837,618	1.74	0.44
IX_BLANK0000028471_C	21592.4	1,845,820	21217.2	1,837,618	1.74	0.44
IX_BLANK0000028471_C	21572.4	1,845,819	21201.2	1,837,617	1.72	0.44
IX_BLANK0000028471_C	21592.4	1,845,820	21217.2	1,837,618	1.74	0.44
IX_BLANK0000028471_C	21596.4	1,845,820	21221.2	1,837,618	1.74	0.44
IX_BLANK0000028471_C	21576.4	1,845,819	21205.2	1,837,617	1.72	0.44
IX_BLANK0000028471_C	21596.4	1,845,820	21221.2	1,837,618	1.74	0.44
IX_BLANK0000028471_C	21592.4	1,845,820	21217.2	1,837,618	1.74	0.44
IX_BLANK0000028471_C	21572.4	1,845,819	21201.2	1,837,617	1.72	0.44
IX_BLANK0000028471_C	21592.4	1,845,820	21217.2	1,837,618	1.74	0.44
IX_DTVBL65387_BL_#1	21752.0	1,846,711	20973.4	1,837,501	3.58	0.50
IX_DTVBL65387_BL_#2	21736.1	1,846,653	20965.4	1,837,443	3.55	0.50
IX_DTVBL65387_BL_#3	21752.0	1,846,711	20973.4	1,837,501	3.58	0.50
IX_DTVBL65387_BL_#4	21752.0	1,846,711	20973.4	1,837,501	3.58	0.50
IX_DTVBL65387_BL_#5	21736.1	1,846,653	20965.4	1,837,443	3.55	0.50
IX_DTVBL65387_BL_#6	21752.0	1,846,711	20973.4	1,837,501	3.58	0.50
IX_DTVBL65387_BL_#7	21752.0	1,846,711	20973.4	1,837,501	3.58	0.50
IX_DTVBL65387_BL_#8	21736.1	1,846,653	20965.4	1,837,443	3.55	0.50
IX_DTVBL65387_BL_#9	21752.0	1,846,711	20973.4	1,837,501	3.58	0.50
IX_DTVBL65387_BL_#10	21752.0	1,846,711	20973.4	1,837,501	3.58	0.50
IX_DTVBL65387_BL_#11	21736.1	1,846,653	20965.4	1,837,443	3.55	0.50
IX_DTVBL65387_BL_#12	21752.0	1,846,711	20973.4	1,837,501	3.58	0.50